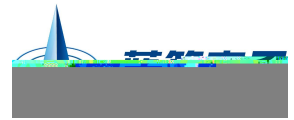


A	2020.08.21		LRC-LMUN5313DW1T1G		
B	2021-11-25	6			



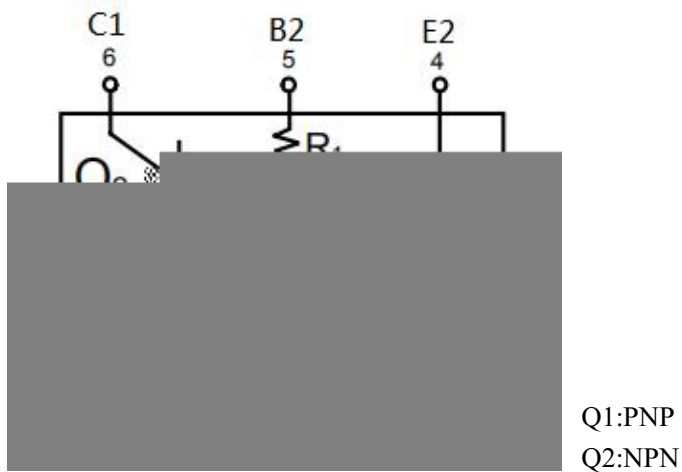
Rev.B Nov.-2021

SOT-363 NPN+PNP

Double silicon NPN and PNP transistor in a SOT-363 Plastic Package

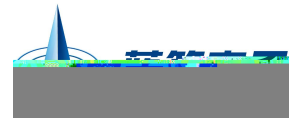
With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process, Halogen-free Product.

Switching applications, interface circuit and driver circuit applications.



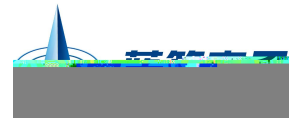
Marking

H313



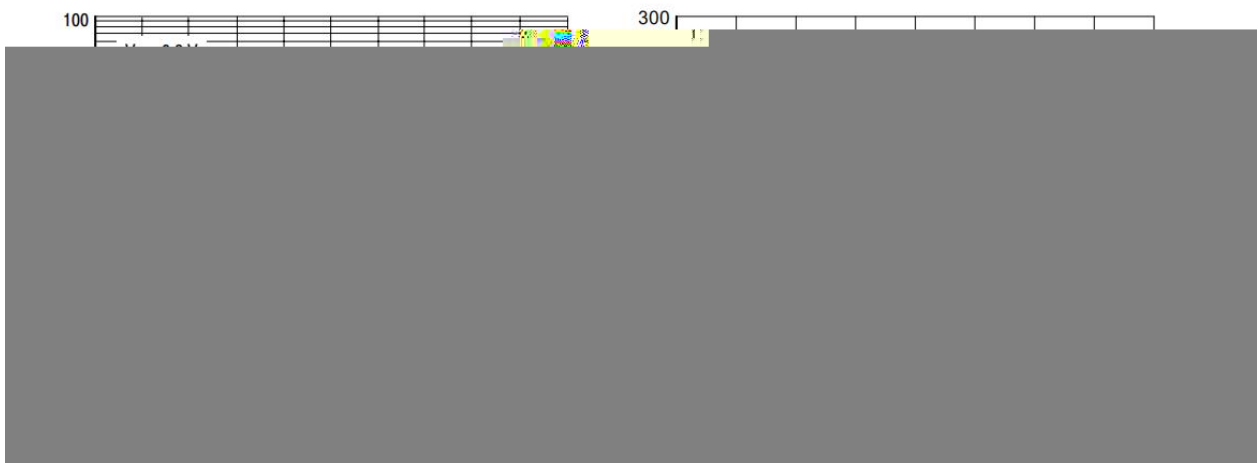
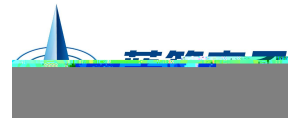
Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	40	V
		-10	V
Output Current	I_{CM}	100	mA
	I_O	50	mA
Collector Dissipation	P_C	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

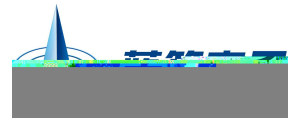
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage	$V_{I(off)}$	$V_{CC}=5.0V$ $I_O=100\mu A$			0.5	V
	$V_{I(on)}$	$V_O=0.3V$ $I_O=2mA$	3			V
Output Voltage	$V_{O(on)}$	$I_O=10mA$ $I_I=0.5mA$			0.3	V
Input Current	I_I	$V_I=5.0V$			0.18	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=50V$ $V_I=0V$			0.5	μA
DC Current Gain	G_I	$V_O=5.0V$ $I_O=5.0mA$	68			
Transition Frequency	f_T	$V_{CE}=10V$ $I_E=-5.0mA$ $f=100MHz$		250		MHz
Resistance1	R_1		32.9	47	61.1	K Ω
Resistance Ratio	R_2/R_1		0.8	1	1.2	

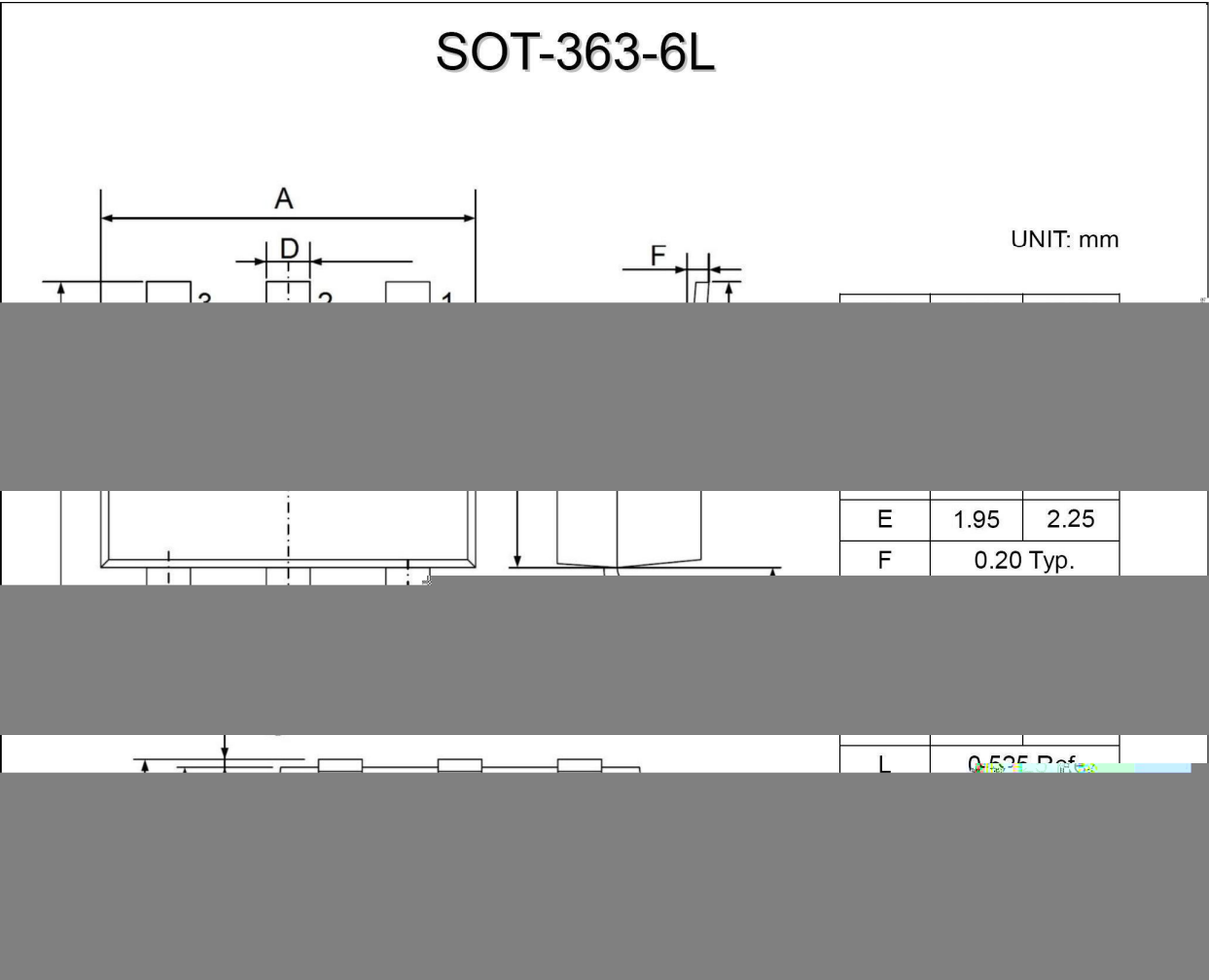


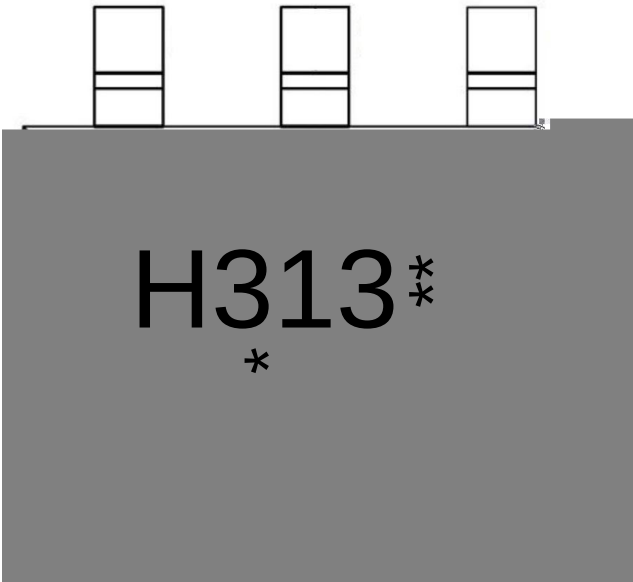
Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40	V
		10	V
Output Current	I_C	-100	mA
	I_O	-30	mA
Power Dissipation	P_d	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage	$V_{I(off)}$	$V_{CC}=-5.0V$ $I_O=-100\mu A$			-0.5	V
	$V_{I(on)}$	$V_O=-0.3V$ $I_O=-2.0mA$	-3.0			V
Output Voltage	$V_{O(on)}$	$I_O=-10mA$ $I_i=-0.5mA$		-0.1	-0.3	V
Input Current	I_i	$V_i=-5.0V$			-0.18	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=-50V$ $V_i=0V$			-0.5	μA
DC Current Gain	G_i	$V_O=-5.0V$ $I_O=-5.0mA$	68			
Transition Frequency	f_T	$V_{CE}=-10V$ $f=100MHz$ $I_E=5.0mA$		250		MHz
Resistance1	R_1		32.9	47	61.1	K Ω
Resistance Ratio	R_2/R_1		0.8	1.0	1.2	





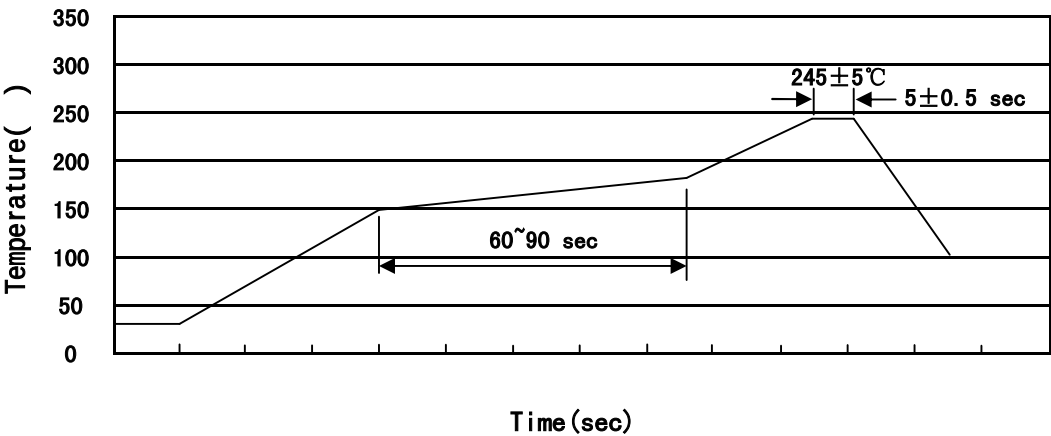




- " 1 "
- H313
- ***:
- Note:
- "1" Pin
- H313 Product Type Code
- ***: Lot No. Code, code change with Lot No.



Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|-----------|--|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180°C, Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5°C, Duration:5±0.5sec. |
| 3 | | 2 | 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

260±5°C 10±1 sec. Temp.:260±5°C Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box	Outer Box
SOT-363	3,000	10	30,000	6	180000	7" ×8	180×120×180	390×385×205